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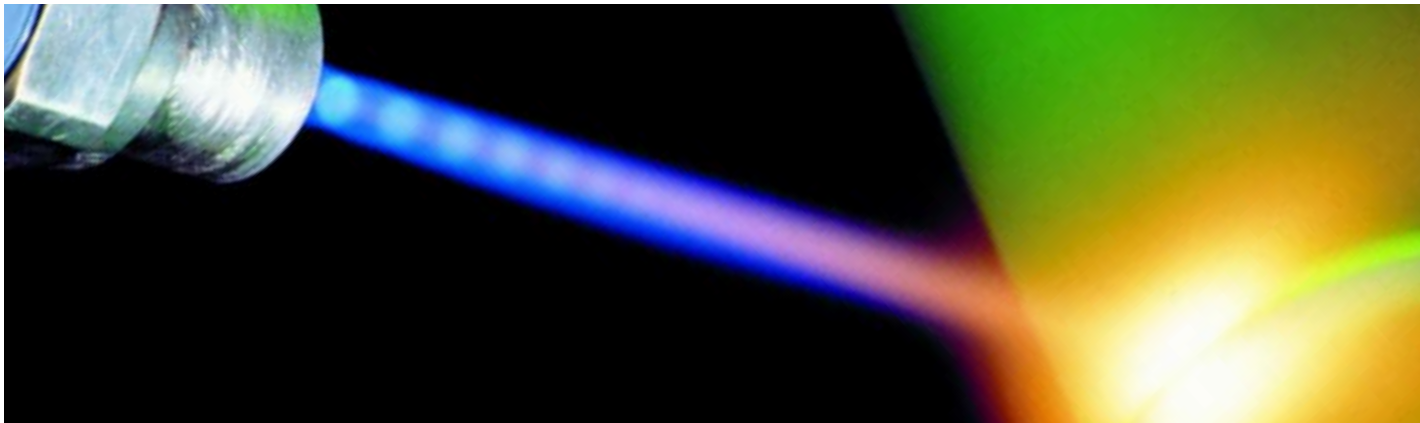




6. Our core products

Essential to the fabric of African industry





Our core products

Essential to the fabric of African industry

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Gases

The range of fuel and industrial gases commonly used in the fabrication industry and supplied by us include:

LPG is a by-product of crude oil refinement. It is made up of several fuel gases such as methane, butane and propane. The ratios of these gases vary by supplier and because of this, flame properties can also differ.

Hydrogen is lighter than air and burns with an invisible flame. It is also the only fuel gas that does not contain any carbon atoms. It is mainly used to scavenge oxygen from furnaces and in the production of margarines. Supplied in cylinders and tube trailers.

Acetylene is a highly flammable, colourless gas of distinct odour. The high solubility of acetylene in acetone (300:1 by volume at 1 100 kPa) enables it to be supplied dissolved in acetone. Acetylene cylinders are filled with porous material which carries the acetone.

Propane is heavier than air, most of its energy is concentrated in the outer or secondary envelope of the flame. This leads to heating over a much wider area which means that it is less sensitive to the distance between the end of the nozzle and the work piece.

Oxygen is a colourless and tasteless gas. It is supplied in high-pressure steel cylinders. Its uses and features vary. Besides its medical uses, in combination with fuel gases such as acetylene, hydrogen or LPG it is used in welding, cutting, brazing, hardening, scarfing, flame cleaning and heating. Oxygen is used in the manufacture of steel, glass, etc.

Nitrogen is a colourless, odourless, non-toxic, almost totally inert gas comprising approximately 20% by volume of air. It is non-flammable and will not support combustion. Nitrogen is supplied in cylinders as a high-pressure gas, or in insulated containers as a liquid.

Argon is the third most abundant of the mixture of gases in the air, the concentration being approximately 0,94% by volume. It is inert, non-toxic, colourless, odourless and tasteless. Supplied in high-pressure metal cylinders and manifolded cylinder packs.

Argon-based welding mixtures (shielding gases) are a sophisticated range of welding gases available for the majority of welding applications. The Argoshield range of shielding gases has been developed internationally to meet the needs of a wide range of welding applications. For this pure argon is used and the formulations have been tried and tested worldwide. Shielding gases are available for MIG and Flux cored welding of mild steel, stainless steel as well as non-ferrous materials.



Our core products

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Carbon dioxide is an odourless, colourless, non-toxic, non-flammable gas. It is supplied as a high-pressure liquefiable gas in metal cylinders. Some applications for compressed CO₂ include: beer dispensing, post-mix soft drink dispensing, shielded arc welding, sparging, foundry sand mould curing, fire fighting (fire extinguishers), and gas atmosphere for preservation of packaged foods.

Equipment and consumables

Welding consumables

Afrox offers a total solution in terms of welding consumables. This ranges from normal carbon steel to the more exotic types of material such as stainless steel, nickel-based alloys and creep resistant alloys, to mention but a few. Welding consumables supplied cater for the full range of welding processes such as TIG, MIG (FCW & MCW), SUB ARC and SMAW.

Machines

Afrox offers electrical arc welding and cutting equipment covering all the popular welding processes. Afrox is proud to be the largest southern African distributor for Miller welding and plasma equipment. Afrox also distributes Thermal Dynamics Plasma equipment as well as the Transarc® range of welding equipment.

Gas equipment

The Afrox industrial gas equipment range is manufactured to the highest standards and it includes multi- and single-stage regulators, flow-meters, heavy-duty cutting torches, combination light- and medium-duty cutting and welding torches, the PortaPak welding and cutting kit and many other gas equipment offers.

Arc accessories

Afrox offers a comprehensive line-up of welding accessories that conform to South African safety standards and assures the purchaser of top quality. The range includes welding cables, electrode holders, earth clamps, etc.

Safety

Afrox also offers an extensive range of safety products; Self-Contained Self-Rescuers, distribution of Personal Protective Equipment (PPE) and Afrox Vendor Managed Solutions (VMS).

